

Additional chart coverage may be found in CATP2, Catalog of Nautical Charts. $SECTOR~\pmb{8} \longrightarrow CHART~INFORMATION$

SECTOR 8

WEST COAST OF WALES — SAINT GEORGE'S CHANNEL, EAST SIDE

Plan.—This sector describes the W coast of Wales from Wooltack Point to Carmel Head and includes the E side of Saint George's Channel, Cardigan Bay, and Caernarfon Bay.

Wooltack Point to Bardsey Island

8.1 Saint Brides Bay (51°49'N., 5°13'W.) lies N of Wooltack Point and is entered between Skomer Island, previously described in Sector 7, and Ramsey Island, 6.5 miles N. It is free from dangers except near the N and S shores. The sea bed is formed of mainly fine sand and mud with excellent holding ground, but the bay is much exposed to provide anything but temporary anchorage. Small craft may take anchorage, sheltered from S winds, in a depth of 6m within Goultrop Roads, at the SE corner of the bay; however, anchorage is not advised in this area during W winds.

Stack Rocks, 23m high, lie 0.5 mile offshore, 3.7 miles NE of Wooltack Point. Hand Marks, a rocky bank, lies 1.2 miles W of Stack Rocks and has a least depth of 9.1m.

Solva (51°52'N., 5°12'W.), a small harbor, lies on the N side of the bay. It is suitable only for small craft which can take the bottom at LW. The harbor mostly dries and a small wharf on the N side has a depth of 5m alongside at HWS. The entrance channel is indicated by range beacons, divided by Black Rock, an islet, which is fronted by drying rocks on its W side. St. Elvis Rock, another small islet, lies close W of the E entrance point of the harbor. The Mare, an above-water rock, lies 0.5 mile S of Black Rock and Greenscar, a grass-topped islet, lies close W of it and is 33m high. Black Scar, another small islet, lies 0.2 mile WSW of Greenscar and rocky ground extends about 0.5 mile SW from it.

Anchorage can be taken in a depth of 13m between Greenscar and the entrance to the harbor, but this roadstead is subject to a heavy SW swell after W storms.

In Saint Brides Bay, the tidal currents are not strong, but both N and S setting currents outside the bay sweep round it and cause a constant W set out of the bay, either on its N side or the S side.

Caution.—A Research Area, the limits of which are shown on the chart, lies within Saint Brides Bay and is marked by lighted buoys. Oceanographic instruments may be found in this area and vessels are cautioned against anchoring within it.

8.2 Ramsey Island (51°52'N., 5°20'W.) is surrounded by high and precipitous cliffs except at a small bay which indents its W side. Carn Llundain, 134m high, rises on the SW side of the island and is the highest peak. Carnysgubor, 97m high, stands near the NW extremity of the island and is also prominent. Several small islets and rocks lie up to 1 mile S of the island.

Ramsey Sound lies between Ramsey Island and the mainland. This channel has deep water, but the bottom is very irregular. The fairway has a least width of 0.2 mile abreast The

Bitches, a rocky ledge, which extends from the E side of the island. The sound can be used by vessels with local knowledge, but the passage to the W of Ramsey Island is preferred.

Bishops and Clerks (51°52'N., 5°24'W.) are a group of islets and rocks which extend up to 2.5 miles W and NW of Ramsey Island.

South Bishop, fronted by sunken rocks, is the SW islet of the group. A main light is shown from a conspicuous tower, 11m high, standing on this islet. A radiobeacon is situated at the light.

Daufraich, a flat islet, lies 0.7 mile NE of South Bishop. Drying rocks lie up to 0.5 mile NE of this islet and there are heavy overfalls and tide rips in their vicinity. Llech Isaf, lying 0.5 mile W of Ramsey Island, dries 3.6m. Llech Uchaf, located 0.4 mile N of Llech Isaf, is 1.5m high. Several areas of foul and uneven ground, with heavy overfalls, lie in the vicinity of these rocks.

Careg Rhoson lies on a narrow ridge 1.7 miles NNE of South Bishop. High rocks extend SW and NE of this islet and overfalls occur in their vicinity.

North Bishop, fronted by high rocks and foul ground, is the NW islet of the group. It is 38m high and lies 2.3 miles NW of the N extremity of Ramsey Island.

Carreg-Trai, a group of drying rocks, lies 1.2 miles E of North Bishop and is generally indicated by breakers.

There are navigable channels through the Bishops and Clerks, but none should be attempted at night, in low visibility, or without local knowledge. The best channel, although narrower than some, leads between the W coast of Ramsey Island and Llech Uchaf.

Caution.—The main shipping route, which is formed by a traffic separation scheme, lies 10 miles W of South Bishop Light and may best be seen on the chart.

Bais Bank (51°57'N., 5°21'W.), a narrow ridge of fine sand and broken shells, extends 5 miles NE from a position 1.2 miles NNW of North Bishop. It has a least depth of 7m which lies near the center. The bank may generally be identified by tide rips and during gales, the sea breaks heavily over it.

To the W of Ramsey Island, the tidal currents are strong and set at rates up to 5 knots at springs and 3 knots at neaps. The current setting N bends E around Ramsey Island and unites with the current setting N from Ramsey Sound. This united current flows onward towards St. Davids Head. The current setting S splits close N of Ramsey Island with one part running through Ramsey Sound and the other to the W of Ramsey Island. These currents attain rates near Bishops and Clerks of 5 knots at springs. In addition, heavy overfalls, whirls, and eddies are formed close to all of the patches of uneven ground in this vicinity.

The currents rate decrease as they move N. Off St. Davids Head, rates of 3 knots at springs and at the N end of Bais Bank, rates of 2 knots are experienced.

St. David's Head (51°54'N., 5°19'W.), although not more than 30m high at its W extremity, is a prominent point. Carn Llidi, 179m high, stands 0.8 mile E of the head. This conspicuous hill is cone-shaped with steep sides. Pen Berry, 173m high, stands 2.5 miles ENE of St. David's Head and is another conspicuous hill. Although its summit is rugged when seen from the W, this hill somewhat resembles Carn Llidi and care is required not to mistake them.

Between St. David's Head and Pen Berry, the coast is formed by perpendicular and steep-to cliffs. Several hamlets and farms may be seen on the higher background.

8.3 Cardigan Bay (52°30'N., 4°30'W.) is considered to lie between St. Davids Head and Bardsey Island, 55 miles NNE. The E and NE parts of the bay contain several dangerous shoals. The two most important are Cynfelin Patches, which extend up to 6.5 miles from the shore, and St. Patricks Causeway, which extends up to 11 miles from the shore. Both of these shoals are awash in places at LWS.

Caution.—Trawlers may be encountered within Cardigan Bay, especially during the spring. Inshore trawlers may be encountered at any time in depths of 20 to 35m. Scallop dredgers may also be encountered within these depths and sometimes in concentrations. Pots may be found moored up to 10 miles offshore.

Strumble Head (52°02'N., 5°04'W.), located 11.7 miles NE of St. David's Head, is the NW extremity of the N projection of Pen Caer, a large promontory. This headland is formed by a barren, rugged mass of rock and is very conspicuous. Two bare and rocky islets lie close off the W spur of the headland and are fronted by drying rocks. Ynys Meicel, the E islet, is attached to the mainland and a main light is shown from a conspicuous tower, 17m high, standing on it.

Garn Fawr, standing 1.5 miles S of the headland, is prominent. This hill is 211m high and has a rugged and rocky summit with steep faces.

Strumble Bank lies 1.4 miles ENE of Strumble Head and heavy seas break over it in bad weather. This bank has a least depth of 17.4m and there are overfalls and tide rips in its vicinity.

Pen Anglas (52°02'N., 4°59'W.), located 3 miles E of Strumble Head, is a low, rugged, and rocky point. It is surmounted by a small obelisk and forms the NW entrance point of Fishguard Bay. Tide rips are sometimes formed over the uneven ground extending off this point.

Between St. David's Head and Strumble Head, the tidal currents follow the general direction of the shore, setting NE and SW. They attain maximum rates of a little over 2 knots. Between Strumble Head and Pen Anglas, the current setting NE, after passing the headland, makes an eddy which extends about 0.5 mile from the shore. At a position about 1 mile offshore, the currents attain rates of 3 knots at springs and 1.5 knots at neaps. It was reported (1987) that the tidal current 1 mile N of Strumble Head attained a rate of 6 knots at springs.

Fishguard (52°01'N., 4°59'W.)

World Port Index No. 34850

8.4 The port of Fishguard lies at the SW side of Fishguard Bay which is entered between Pen Anglas and Dinas Head, 3 miles E. The shores of the bay consist of moderately high rocky cliffs, backed by rugged summits.

Tides—Currents.—The tide rises about 4.8m at springs and 3.4m at neaps.

Depths—Limitations.—The harbor, which has general depths of 2 to 6m, is protected on its N and E sides by breakwaters. A main quay provides 549m of berthage and has depths up to 6m alongside. There are facilities for general cargo, ro-ro, container, and vehicle and passenger ferry vessels. Vessels of up to 160m in length and 5.9m draft can be accommodated.

Aspect.—Dinas Head, the E entrance point of the bay, is a prominent headland with a distinctive wedge-shaped appearance. It is the N and highest part of Dinas Island, a peninsula connected to the mainland by a low swamp.

Mynddmelyn, 305m high, stands 2.5 miles SSE of Dinas Head. This conspicuous mountain has a nipple rock on its summit and forms the beginning of a rocky ridge which trends E for 3 miles. This ridge terminates in Carn Ingli which has a rugged top and is 351m high. A prominent white hotel stands on the W side of the harbor and a ruined castle is situated on a point, 0.7 mile S of the head of the N breakwater.

A light is shown from a prominent tower, 20m high, standing on the head of the N breakwater. A lighted range, which may best be seen on the chart, indicates the approach to the main quay.

Pilotage.—Pilotage is compulsory for vessels over 500 grt or with drafts over 4.3m. Pilots can be contacted by VHF and board about 0.8 mile E of the head of the N breakwater. Vessels should send an ETA at least 12 hours in advance with amendments up to 4 four hours before arrival. Messages may be passed by radio through Ilfracombe (GIL).

Anchorage.—Anchorage is not advised when there is a possibility of onshore winds. Vessels may anchor in depths of 14 to 16m about 0.7 mile NE of the head of the N breakwater. Vessels should remain at least 0.5 mile from the breakwater in order not to obstruct traffic.

Caution.—An area, within which anchoring is prohibited, lies in the harbor and may best be seen on the chart.

The harbor is susceptible to seiches which can cause fluctuations in the sea level.

Vessels should give the head of the N breakwater a wide berth as its foundation extends up to 60m seaward.

A wreck, with a swept depth of 14m, lies about 1 mile NNW of the head of the N breakwater.

An area lying adjacent to the main quay is fouled by hauling off wires and associated concrete clumps.

High-speed craft operate out of Fishguard.

8.5 Newport Bay (52°02'N., 4°52'W.) lies between Dinas Head and Pen-y-bal, 2.3 miles E. The shore between Dinas Head and the mouth of Afon Nyfer, which discharges into the SE part of the bay, consists of slate rock. Pen-y-bal is a high

and steep-to point. Carregedrywy, an above-water rock, lies 0.2 mile N of Pen-y-bal and is connected to the mainland by a drying ledge. Foel Goch stands close within the cliffs 1.5 miles NE of Pen-y-bal. This hill is prominent, round-topped, and 190m high.

Newport Sands are a large tract of fine, smooth, and hard drying sand which extends up to 0.5 mile N from the mouth of Afon Nyfer. Newport, a resort village, is situated on the S side of the river. A small harbor, used by yachts and fishing boats, lies at the S side of the river mouth. An outfall pipeline extends 0.4 mile NW from close W of the river mouth. Vessels may anchor in any part of the bay, but during on-shore winds, a considerable sea sets into it and at times breaks furiously on the sands.

Cemaes Head (52°07'N., 4°44'W.), 187m high, is located 6.5 miles NE of Pen-y-bal. It is formed by a bold cape which rises steeply above the cliffs. Foul ground, with depths of 11 to 13m, extends up to about 1 mile N of this head and should be given a wide berth.

Between Newport Bay and Cemaes Head, the tidal currents set NE and SW at rates of 1.5 knots at springs with indrafts running into the bays.

8.6 Port Cardigan (52°07'N., 4°42'W.), a resort bay, lies between Cemaes Head and Cardigan Island, 1.5 miles ENE. The latter island is 50m high, steep-to, and has a dangerous wreck lying close NW of its W side. Freni Fawr, a mountain, stand 10 miles SSE of the bay. It is 393m high and very conspicuous from seaward.

There are depths of 14 to 18m in the entrance of the bay. These decrease gradually towards the head where the Afon Teifi discharges through a sand-encumbered estuary. The bottom of the bay is generally sandy and there are no off-lying dangers. A harbor, used by yachts and fishing boats, is formed by the estuary of the river. The entrance channel has a least depth of 0.3m over the bar and is subject to considerable changes. A conspicuous hotel stands at the E side of the bay. Shelter from SW gales may be obtained under the lee of Cemaes Head and there is good holding ground, but strong winds from between WNW and NNE cause a heavy sea in the bay.

Pencribach (52°09'N., 4°34'W.), a table headland, is located 5 miles E of Cardigan Island. It is 132m high and surmounted by several pylons and structures.

New Quay Head (52°13'N., 4°22'W.), with a high and rugged face, is located 15 miles NE of Cemaes Head. Pen-y-Castell, 92m high, rises close S of this point and is prominent. Carreg Draenog, a large rock, lies 0.5 mile W of the point and is very prominent from the NE and SW. Carreg Walltog, another large rock, lies close W of the point and is connected to the shore by a drying ledge.

Between Port Cardigan and New Quay Head, the tidal currents are not strong and their general direction is parallel to the coast.

New Quay Bay is entered between New Quay Head and Ina Point, 1 mile ESE, and its head is backed by clay cliffs. Foul ground and rocks extend 0.3 mile NW from Ina Point and an

outfall pipeline extends 0.7 mile NNW from the vicinity of these dangers. A small drying harbor, used by yachts and fishing boats, lies in the W part of the bay and is protected by a breakwater.

Aberayron (Aberaeron), a small drying harbor, lies 3 miles NE of Ina Point at the mouth of the Afon Aeron. It is protected by a breakwater, fronted by a shingle bar, and used by fishing boats and yachts. Good anchorage, with offshore winds, in a depth of 19m, sand, can be obtained between 1 and 2 miles off the harbor. Closer in, the bottom is reported to be foul with large stones.

The coast between Ina Point and Aberayron consists generally of perpendicular slate cliffs which vary in height between 6 and 37m. The land close behind these cliffs abruptly rises to a height of about 60m.

Caution.—Targets, buoys, and moorings supporting scientific instruments are occasionally moored within 20 miles of Pencribach. They are associated with firing exercises and their positions are frequently changed. Care should be taken when navigating in the area to the N of the headland, especially at night and in poor visibility.

8.7 Aberystwyth (52°25'N., 4°05'W.), a tourist resort, is situated 12 miles NE of Aberayron. It stands on the N side of the Afon Rheidol at its confluence with the Afon Ystwyth. A small harbor, used by pleasure craft and fishing vessels, lies close within the mouth of the Afon Rheidol and is fronted by a bar which dries. It is protected from the SW by a breakwater, which is partly submerged, and the entrance is formed by the outlet of the two rivers. Vessels up to 33m in length and 3.2m draft can enter at HW, but local knowledge is required. A bridge spans the Afon Ystwyth near the root of this breakwater.

A monument stands on the summit of a detached hill, 124m high, which rises between the mouths of the two rivers. Castle Point, surmounted by the ruins of a castle, is located 0.4 mile N of the breakwater and is the W extremity of a low promontory. A prominent church, with a square tower, and the extensive buildings of a college stand close E of this point. A conspicuous television mast, 152m high, stands about 3 miles S of Aberystwyth.

Sarn Wallog (52°27'N., 4°05'W.) is a narrow drying spit, consisting of shingle and gravel interspersed with large stones, which extends 0.3 mile seaward from a point on the shore located 2.7 miles N of Aberystwyth.

Sarn Cynfelyn, a narrow shoal, extends about 2.3 miles WSW from Sarn Wallog and has a least depth of 2.7m.

Cynfelyn Patches, with a least depth of 1.5m, lies close W of Sarn Cynfelyn and extends up to 6.5 miles offshore. The W extremity of this shoal area is marked by a buoy. A channel, 0.3 mile wide, separates Sarn Cynfelyn and Cynfelyn Patches and has a least depth of 6.4m in the fairway.

Borth (52°29'N., 4°03'W.), a resort town, is situated 5.2 miles N of Aberystwyth. It occupies 1 mile of coastline and has numerous conspicuous buildings.

Between New Quay Head and Borth, the tidal currents have no great strength and only attain rates of 1 knot at springs and 0.5 knot at neaps. **Aberdovey** (52°31'N., 4°03'W.), a small harbor, lies on the N side of the large estuary of the River Dovey, 7.5 miles N of Aberystwyth. The land on the N side of this estuary rises steeply to hills of up to 270m in height, but the land on the S side consists of low and marshy ground. The estuary is encumbered by drying sandbanks and fronted by a bar. A channel, marked by buoys, leads over the bar and into the river. It has a least depth of 0.9m and is used by small craft with local knowledge. Tides here rise about 5m at springs and 2.8m at neaps. The harbor is mostly used by yachts and is no longer used for commercial shipping. Small craft of up to 45m in length and 3m draft can be accommodated at HW. A small fishing boat basin lies on the S side of the estuary.

8.8 Pen Bwch Point (52°37′N., 4°08′W.) is located 5 miles NNW of Aberdovey. Foel Wyllt, an isolated and rounded hill, stands 3.5 miles E of this point. It is 311m high and prominent from seaward.

Sarn-y-Bwch extends about 4 miles WSW from Pen Bwch Point and has depths of less than 9m. This extensive shoal is composed of large, loose stones and dries, in patches, up to nearly 1 mile offshore. Its SW extremity is marked by a buoy.

Llangelynin Shoal, with a least depth of 4.6m, lies about 1 mile offshore, 2.5 miles N of Pen Bwch Point.

Barmouth (52°43'N., 4°03'W.), a small harbor, lies on the N side of the mouth of the Afon Mawddach which discharges into the sea 6.5 miles NNE of Pen Bwch Point. It is used by yachts, pleasure craft, and fishing boats. The prominent town, which backs the harbor, is a popular resort. The S entrance point of the river is formed by a long and narrow spit. The N entrance point is fronted by a small and sandy islet. A railway bridge spans the river at the E end of the town. Fegla Fawr, a remarkable low and rounded hill, stands on the S side of the harbor, close E of the bridge. Cader Idris, a prominent mountain, stands 4.7 miles E of the bridge and is 891m high.

The river mouth is fronted by a bar which is subject to considerable change. A channel, marked by a lighted buoy, leads over the bar and has a least depth of 0.3m. Vessels can anchor, in depths of 6 to 10m, W of the bar. An outfall pipeline, marked at its seaward end by a lighted buoy, extends 0.9 mile WSW from a point on the shore, 0.6 mile NW of the N entrance point.

Between Aberdovey and Barmouth, the tidal currents are not strong, having rates of less than 1 knot at springs.

Mochras Point $(52^{\circ}49^{\circ}N., 4^{\circ}09^{\circ}W.)$, located 7 miles NNW of Barmouth, is a low and sandy point consisting of sandhills. These hills front the seaward side of an area of reclaimed marshland. A spit of sand and stones, with a least depth of 1.2m, extends 1.3 miles SW from the point.

St. Patricks Causeway (Sarn Badrig) (52°45′N., 4°14′W.) extends about 11 miles SW from a section of the coast close S of Mochras Point. This extensive shoal dries in places and is marked at its SW end by a lighted buoy. It is comparatively steep-to on its SE side, but a number of shoals, with depths of 7 to 9m, lie between Barmouth and the SW extremity. The outer part of the NW side of this shoal is also comparatively steep-to, but North Shoals, with depths of 2 to 8m, extend up to about 2.5 miles NW from its middle and inner parts.

Although the maximum strength of the tidal current at springs is only 1 knot in this vicinity, heavy ripples and overfalls form over St. Patricks Causeway. In strong winds, a heavy breaking sea is often formed in this area.

8.9 Tremadog Bay (52°50'N., 4°15'W.) occupies the NE head of Cardigan Bay and is entered between Mochras Point and Trwyn Cilan, 14 miles W. The bay provides extensive anchorage, in depths of 18 to 20m, near its center over a mud bottom, but this roadstead is untenable with strong SW winds. The bay is foul at its W side.

Mochras Lagoon, a broad and sandy drying inlet, is entered 1 mile NE of Mochras Point and is used by numerous yachts during the summer months. Harlech Castle, with conspicuous ruins, stands on a steep grassy slope, 2 miles N of the entrance to the lagoon

Porthmadog (52°55'N., 4°08'W.) lies 12 miles NNW of Barmouth on the N side of the estuary of the Afon Dwyryd and the Afon Glaslyn. This small harbor is used by fishing boats and pleasure craft. The estuary is encumbered by broad expanses of drying sands and fronted by a bar. Tides here rise about 4.2m at springs and 1.3m at neaps. A channel, marked by buoys, crosses the bar. It has a least depth of 0.6m in the fairway, but is subject to change. An outer approach lighted buoy is moored about 1.7 miles WSW of the mouth of the estuary.

Moel-y-Gest, a prominent and isolated hill, stands on the N side of the entrance and is 260m high. A conspicuous white house stands in the vicinity of the N entrance point. The conspicuous ruins of a castle stand on the summit of a promontory at Criccieth, 3 miles WNW of the N entrance point.

Pwllheli (52°53'N., 4°24'W.), a small harbor, lies at the mouth of the Afon Erch, 9 miles W of Porthmadog. There are extensive facilities for yachts and the harbor is also used by fishing boats. The small town backing the harbor is a tourist center.

Outer Shoal, with a least depth of 3.6m, lies 1.7 miles SE of Pwllheli. Gimblet Shoal, with a least depth of 2m, extends about 2.3 miles SSE from Pwllheli. During SW gales, seas break over these two shoal areas.

Abersoch, an extensive yacht basin, lies on the S side of the Afon Soch, 5 miles SW of Pwllheli. A conspicuous windmill, without arms, stands on high ground, 2.3 miles NNW of the basin.

- **8.10** Trwyn Cilan (52°47'N., 4°32'W.), the W entrance point of Tremadog Bay, is a bold promontory.
- **St. Tudwals Islands** (52°48'N., 4°28'W.), consisting of two small islands, lie centered 0.5 mile E of the E side of this promontory. A main light is shown from a tower, 11m high, standing on the W island and several drying rocks, lying 0.3 mile SE of the E island, are marked by a buoy.
- St. Tudwals Sound leads between the W island and the mainland. This channel has a least depth of 11m in the fairway, but the tidal currents are strong and a short cross sea arises when the wind is against the tide. St. Tudwals Roads lies close

N of the islands and is divided into two parts by a narrow sandbank with depths of less than 5m. These roadsteads are somewhat protected from the N and W, but with strong winds from the S and E, heavy seas are raised. There is good holding ground within the outer part of the roads in a depth of 11m, sand and shells, about 0.8 mile NE of the E island. The inner part of the roads also affords good anchorage, in depths of 6 to 9m, NNW of the W island. Either anchorage may be entered without difficulty from the S through St. Tudwals Sound, but at LW, vessels with drafts of over 5.5m should approach the outer part of the roads from the E.

Caution.—During May to October, several yacht racing buoys may be moored within Tremadog Bay.

8.11 Porth Neigwel (52°48'N., 4°35'W.) is entered between Trwyn Cilan and Trwyn Talfarach, 4.5 miles WNW. This large bay affords temporary anchorage during offshore winds, in depths of 18 to 22m, about 1 mile offshore. However, the bay should be used only during offshore winds as the current sets into it and the prevailing SW winds quickly cause a heavy sea.

Aberdaron Bay is entered 2 miles WSW of Trwyn Talfarach and is sheltered from the W. This bay is not recommended as an anchorage as the holding ground is bad and it is exposed to S winds which cause a heavy sea. Two small islets lie close S of the E entrance point of the bay.

A conspicuous radio tower, 50m high, surmounts the summit of Mynydd Rhiw. This peak stands 3.5 miles NE of the head of Aberdaron Bay and is 303m high. A radio direction finding station is situated at the tower.

Braich-y-Pwll (52°48'N., 4°46'W.), a bold and rocky point, is located 8.5 miles W of Trwyn Cilan. It is steep-to and lies at the SW extremity of the Lleyn Peninsula. Two prominent hills rise close within the point.

Devil's Ridge lies 4.5 miles SE of Braich-y-Pwll. This bank has a least depth of 8.5m and violent turbulence, which is dangerous to small craft, has been observed over it.

8.12 Bardsey Island (52°45'N., 4°48'W.) lies 2.3 miles SSW of Braich-y-Pwll and is fronted by foul ground on its W side. A conspicuous hill, 165m high, rises steeply at the E side of the island, but the S part is low. The ruins of an abbey are situated on the N part of the island. A main light is shown from a prominent tower, 30m high, standing at the S end of the island. Bastram Shoal, dangerous and rocky, lies between 1 and 3.2 miles SSE of Bardsey Island. This shoal has very irregular depths, the least being 6.3m. Violent turbulence has been reported over this shoal and heavy seas are formed in its vicinity during strong winds.

The Devil's Tail (52°38'N., 4°41'W.), a narrow ridge of rock, extends 5 miles SSW from a position 6.5 miles SE of Bardsey Island. The ridge has a least depth of 23m, but depths of 40m lie within about 100m of its shallowest part, causing areas of violent turbulence and a heavy race during the strength of the tide.

Caswenan Rock, a pinnacle rock, lies about 1 mile SSW of Bardsey Island. It has a least depth of 17.8m and is usually marked by a tide rip.

Ship Ledge, with a least depth of 10.5m, lies about 0.3 mile E of the SE extremity of Bardsey Island. Heavy overfalls form, at times, over an area, with an uneven bottom and depths of 27 to 35m, lying about 1 mile W of Bardsey Island.

Maen Bugail, a small rock, lies about 0.3 mile N of the N end of the island and dries 4m. A heavy tide race extends nearly 0.5 mile N from this rock.

Bardsey Sound (52°47'N., 4°46'W.) lies between the island and the mainland. The channel fairway has depths of 24 to 48m and is used by coastal vessels with local knowledge.

The tidal current setting S through St. Tudwals Sound rounds Trywn Cilan and sets NW into Porth Neigwel. It also makes a circuit of Aberdaron Bay and then follows the line of the coast towards Braich-y-Pwll. Both the NW and SE setting currents run towards the shore and into the bays, especially during S winds. When the wind is opposed to the tidal current, it causes a turbulent sea near St. Tudwals Sound and over all the dangers in the vicinity of Bardsey Island. In addition, a strong tide race is formed around Braich-y-Pwll.

The current setting NW splits on meeting Bardsey Island. One portion rounds the S point of the island and sets outside the shoals lying on its the W side while the other portion sets round the N part of the island, inside Maen Bugail. These two portions of the current unite at a position about 1.5 miles from the island and from this junction, a strong eddy sets back towards the island. Similarly, the current setting SE also splits on meeting the island. One portion sets along the W shore of the island while the other portion sets through Bardsey Sound. These two portions of the current unite at a position about 2 miles SE of the island and from this junction, a strong eddy sets back towards the SE side of the island.

Bardsey Island to Holyhead Bay

8.13 Caernarfon Bay (Caernarvon Bay) (53°05'N., 4°35'W.) is entered between Bardsey Island and Holy Island, 32 miles N. The SE part of the bay is formed by the NW coast of the Lleyn Peninsula which is bold, rocky, mainly steep-to, and rises to mountainous country inland. Snowdon, the tallest peak, stands 10 miles inland. Its summit is 1,083m high and is sometimes covered by clouds. The NE part of the bay is formed by the SW coast of the island of Anglesey. The shore of this island is indented by many small bays and fronted by ledges and rocks which extend up to 1.5 miles offshore. The island of Anglesey is separated from the mainland by the Menai Strait, a narrow and navigable waterway. Holy Island lies close off the W coast of Anglesey and forms the S side of Holyhead Harbor.

The Tripods (52°49'N., 4°46'W.), a steep-to bank, extends 1.5 miles N and lies with its S end located 1 mile NNW of Braich-y-Pwll. It is formed of sand and shells and has a least depth of 10.1m. The tidal currents, which attain rates of up to 3 knots at springs, produce overfalls on this bank and a heavy sea is formed when the wind is against tide.

Maen Mellt, a rock 6m high, stands about 0.5 mile offshore, 3.5 miles NE of Braich-y-Pwll.

Trwyn Porth Dinllaen (52°57'N., 4°34'W.), located 11.5 miles NE of Braich-y-Pwll, is the N extremity of a rocky point which projects 0.6 mile N from the coast. Careg-y-Chwislen, a drying rock fronted by shoals, lies 0.2 mile ENE of the point and is marked by a beacon. A light is occasionally shown from the coastguard station situated on NE side of the point. Porth Dinllaen, a shallow bay, lies close SE of Trwyn Porth Dinllaen and provides anchorage to pleasure craft during offshore winds. Several small craft moorings are situated within the bay.

At more than 2 miles NW of Bardsey Sound, the tidal currents set NNE and SSW, taking the trend of the shore. Between Bardsey Sound and Trwyn Porth Dinllaen, the tidal currents near the shore set NNE and SSW at rates of up to 2 knots at springs.

Trwyn-y-Tal (53°00'N., 4°26'W.), a rocky promontory, is located 5.5 miles NE of Trwyn Porth Dinllaen.

Bwlch-yr-Eifl stands 1 mile SE of this promontory and is the most conspicuous of a lofty and steep range of mountains which slope gradually towards the sea. When the higher peaks are hidden by clouds, this mountain may be easily identified by a white patch, formed by stone quarries, which extends up two-thirds of its height from sea level. After rounding Holy Island from the N, this mountain usually shows with two sharp peaks. However, in very clear weather, it may show as three very sharp peaks, the middle and tallest being 561m high. Bwlch-yr-Eifl slopes rapidly down to a cliff at Trwyn-y-Gorlech, located 1.5 miles SW of Trwyn-y-Tal. The whole form of this mountain is so conspicuous a feature that it is impossible to mistake and it therefore serves as an infallible landmark.

Penrhyn Glas, located 1.2 miles SW of Trwyn-y-Gorlech, is formed by a conspicuous perpendicular cliff, 120m high. A conspicuous radio mast stands on a peak, 6.3 miles ENE of Trwyn-y-Tal.

Fort Belan (53°07'N., 4°20'W.), located 8.5 miles NE of Trwyn-y-Tal, lies at the N end of a promontory which forms the S side of the entrance to the Menai Strait. Dinas Dinlleu, 31m high, stands 2.5 miles S of Fort Belan. This small hill interrupts the monotony of the low coast in this vicinity. A conspicuous hotel stands close N of Dinas Dinlleu and a church, with a prominent spire, is situated at Llandwrog, 1 mile inland. The spire is reported to show plainly with the afternoon sun.

Caer Arianrhod, a drying patch, lies about 0.8 offshore, 3.5 miles SSW of Fort Belan.

Abermenai Point, marked by a light, is located 0.2 mile N of Fort Belan and is the N entrance point of the Menai Strait. It is formed by a low-lying sandy spit which is backed by an extensive area of drying flats. Mussel Bank, a drying bank of stones, lies on the N side of the entrance channel, 0.7 mile W of the entrance, and is marked by a lighted buoy.

8.14 Menai Strait (53°08'N., 4°19'W.), which separates the island of Anglesey from the mainland is 20 miles long, narrow throughout, and less than 280m wide in places. The passage through the strait is available for vessels up to 80m in length.

Britannia Bridge, a rail and road bridge, crosses the strait 5.5 miles NE of Caernarfon and has a vertical clearance of 27.4m under the center of its S span. A suspension bridge, with a vertical clearance of 30.5m, crosses the strait 0.8 mile E of Britannia Bridge. An overhead cable, with a vertical clearance of 22m, spans the strait close W of Britannia Bridge.

The reach of the strait lying between the two bridges is known as The Swellies. It is encumbered by numerous rocks and the tidal currents here attain rates of up to 7 to 8 knots at springs. Local knowledge is essential, even for small craft, and passage through The Swellies should only be attempted near the time of high water slack.

Port Dinorwic, a small harbor, lies on the SE side of the strait, 3 miles SW of the suspension bridge. It is used by yachts and small craft and consists of a tidal basin and a wet dock which is operated as a marina.

Caernarfon (Caernarvon), a small drying harbor, lies on the S side of the strait, 2 miles within the SW entrance. Tides here rise about 5.3m at springs and 4.1m at neaps. An old castle and the walls surrounding the town are in a good state of preservation and are prominent from seaward. The harbor no longer handles commercial traffic and is used only by pleasure craft and fishing vessels. Good anchorage can be taken within the strait, in depths of 5 to 9m, W of the harbor.

Depths—Limitations.—Caernarfon Bar, with a depth of about 1m, lies 3 miles W of the entrance and obstructs the approach to the strait. The depth over this sandy bar is constantly changing and local knowledge is required. Depths of 5.5m at MHWS and 3.5m at MHWN were reported (1990) to lie over the bar. A channel, marked by buoys, leads from inside the bar to the entrance and passes between extensive drying sand banks.

Tides—Currents.—At the SW end of the strait, tides rise about 4.7m at springs and 3.6m at neaps. At the NE end of the strait, tides rise about 7.7m at springs and 6.1m at neaps. The tidal currents in the strait are caused primarily by the differences in sea level at the ends, but are modified by local conditions. The rate of these currents at springs is about 3 knots in the wider parts. At the SW entrance, the rate of the currents at springs is about 5 knots, but they increase to about 8 knots in The Swellies.

Pilotage.—Pilotage is compulsory for all commercial vessels with certain exceptions. Due to the constant changes in the channels and the great strength of the tidal currents, local knowledge is essential. Vessels requiring a pilot for the SW entrance to the Menai Strait should send an ETA to Caernarfon 24 hours in advance. Pilots can be contacted by VHF and usually board at the approach to the bar.

Caution.—Numerous shellfish beds lie along the shores of the Menai Strait.

Numerous small craft moorings lie along the shores of the strait

Several marinas lie along the shores of the strait and numerous pleasure craft and yachts may be encountered in the vicinity of the approaches and entrances.

The buoys marking the approach channel are moved to match the frequent changes of the adjacent banks.

8.15 Llanddwyn Island (53°08'N., 4°25'W.) lies about 0.3 mile offshore, 3 miles WNW of Fort Belan. In reality, this island is a peninsula which is connected by a narrow isthmus to the S coast of Anglesey. A light is shown from a tower standing on the SE end of the island. A tower also stands on the SW end of the island and should not be mistaken for the light tower. The W and S sides of the island are fronted by rocks. A cove, lying on the E side of the island, provides shelter to small craft in good weather or offshore winds. The coast between the island and the S extremity of Holy Island, 9 miles NW, is indented by many small bays and inlets. Ledges and detached rocks, some of which dry, front the shore and extend up to 1.5 miles seaward in places. Vessels are advised to give this section of the coast a wide berth.

8.16 Holy Island (53°18'N., 4°39'W.) is separated from Anglesey by a narrow drying channel and forms the S side of Holyhead Bay. Holyhead Mountain, 217m high, stands on the NW end of the island and is conspicuous from all directions.

A cluster of rocks extends up to 0.7 mile SW from the SW extremity of the island and is marked by a beacon. A sunken rock lies at the outer end of this cluster and causes a tide race. Maen Piscar, a dangerous drying rock, lies about 0.8 mile offshore, 1.5 miles NW of the SW extremity of the island.

Careg Hen, a steep-to and isolated rock, lies 2.8 miles WSW of the SW extremity of the island and forms the outer danger in this vicinity. It has a least depth of 5.6m and is generally distinguished by overfalls. The sea occasionally breaks over it in bad weather.

South Stack (53°18'N., 4°42'W.), a rocky islet, lies close W of the W extremity of the island to which it is connected by a suspension bridge. A main light is shown from a conspicuous tower, 28m high, standing on this islet. This light may be obscured over some sectors. A conspicuous radio mast stands 1 mile E of the light.

North Stack, an islet, is located 1 mile NE of South Stack and lies close W of the NW extremity of the island. A fogsignal station, consisting of three prominent white houses surrounded by a wall, is situated on the point close E of this islet

At positions 5 miles and 7 miles seaward of South Stack, the currents attain rates of up to 3.5 knots and 2.5 knots, respectively.

Both N and S setting tidal currents run with strength in the vicinity off South Stack and North Stack, producing dangerous races. These currents attain rates of up to 5 knots at springs and 3 knots at neaps. To the N of South Stack, the main axis of the N setting current takes a NE direction towards The Skerries. The S setting current, after passing North Stack and South Stack, divides into two parts. One part continues its course towards Bardsey Island while the other inshore part quickly decreases in strength and makes a circuit of Caernarfon Bay.

Caution.—A submarine cable, which may best be seen on the chart, extends seaward from a point on the W side of Holy Island, 2.2 miles SE of South Stack.



Photograph Courtesy of Jürgen Tronicke

South Stack

Submarines, both surfaced and dived, frequently exercise in the area W of Holy Island.

Holyhead Bay

8.17 Holyhead Bay (53°19'N., 4°38'W.) is entered between North Stack and a bold and precipitous promontory, 6 miles NE. Holyhead Harbor lies at the S side of the bay. The E side of the bay is formed by the NW coast of Anglesey. The bay affords anchorage during offshore winds, but is seldom used due to better shelter being available at all times within the harbor.

Carmel Head (53°24'N., 4°34'W.) is the N extremity of the promontory which forms the N entrance point of the bay. Mynydd-y-Garn, 168m high, stands 1.5 miles SE of the head. A monument surmounts this prominent hill.

Carmel Rocks, with a least depth of 4.9m, lies about 1 mile WSW of Carmel Head and is marked by heavy tide rips, except for a short time at slack water.

Langdon Ridge, a large rocky shoal, lies about 4.5 miles NE of North Stack and is marked by a lighted buoy. This shoal consists of two distinct ridges, with a least depth of 9.1m, and is usually indicated by heavy overfalls.

Bolivar Rock, with a least depth of 2.2m, lies near the outer end of the foul ground which extends up to about 0.7 mile W from the E side of the bay. A buoy, moored 3 miles S of Carmel Head, marks the W side of this rock. Foul ground, with depths of less than 5m, also extends up to 0.8 mile seaward of the SE coast of the bay.

Caution.—An IMO-adopted Traffic Separation Scheme is centered 8 miles NW of Holyhead Bay and may best be seen on the chart.

The Skerries, a group of rugged islets and rocks, lies in the N approach to Holyhead Bay, 1.5 miles NW of Carmel Head, and is fully described in Sector 9.

Holyhead (53°19'N., 4°38'W.)

World Port Index No. 34770

8.18 Holyhead Harbor, lying in the S part of Holyhead Bay, is a terminal for vehicle and passenger ferries which run to and from the Republic of Ireland. It is protected by a main breakwater which extends in a double curve 1.2 miles ENE from the shore.

Tides—Currents.—The tides rise about 5.7m at springs and 4.5m at neaps. The tidal currents, which set NNE and SSW across the entrance, are weak within the bay.

Depths—Limitations.—The port consists of Outer Harbor, New Harbor, and Inner Harbor. Outer Harbor lies S of the head of the main breakwater and has a depth of 12m. Aluminum Jetty extends 900m into the harbor from Salt Island and

provides a berth, 184m long, with a dredged depth of 13.5m alongside. Bulk vessels of up to 60,000 dwt and 11m draft can be accommodated.

New Harbor lies W of Salt Island and is completely sheltered by the main breakwater. A main ro-ro berth, 300m long, extends into the harbor from the W side of Salt Island. Space within this harbor is limited due to numerous moorings. Ro-ro vessels of up to 150m in length and 7m draft can be accommodated.

Inner Harbor, with depths of 4.4 to 5.4m, has extensive facilities for general cargo, container, and ro-ro ferry vessels. Vessels of up to 140m in length, 20m beam, and 4.6m draft can be accommodated. A basin for fishing vessels lies at the S side of the entrance to this harbor.

Aspect.—A conspicuous chimney stands 2 miles SSE of the head of the main breakwater. A conspicuous tower, part of a convent, stands on the W side of Inner Harbor. A prominent monument stands on the E side of Inner Harbor. A light is shown from a prominent stone tower, 20m high, standing on the head of the main breakwater.

Pilotage.—Pilotage is compulsory for all vessels over 40m in length. Pilots can be contacted by VHF and usually board about 0.3 mile NNW of the head of the main breakwater. Vessels should send an ETA at least 24 hours in advance and contact the Harbor Control not less than 10 minutes before entering. Weather permitting, pilots may board farther offshore on request. Vessels intending to berth at the Aluminum Jetty should send an ETA 7 days, 48 hours, and 24 hours in advance.

Anchorage.—Vessels may anchor in Outer Harbor, which is a harbor of refuge, in depths of 6 to 13m. The bottom is hard, overlaid with mud, but the holding ground is good. In E winds, which raise an uncomfortable sea, better shelter may be obtained in the E part of this area. Small vessels may obtain anchorage within New Harbor, but space is very limited.

Caution.—Anchorage is prohibited within the limits of all the port fairways.

High-speed craft operate out of Holyhead.

A wreck, with a swept depth of 8.5m, lies about 0.8 mile NE of the head of the main breakwater and is marked by a lighted buoy.

Care must be exercised when rounding the main breakwater as drying boulders extend up to 60m from its inner part.

Surging may be experienced by vessels alongside the berths within Inner Harbor due to large ro-ro ferry vessels entering and leaving.

A Traffic Separation Scheme is in force in the approaches to Holyhead.